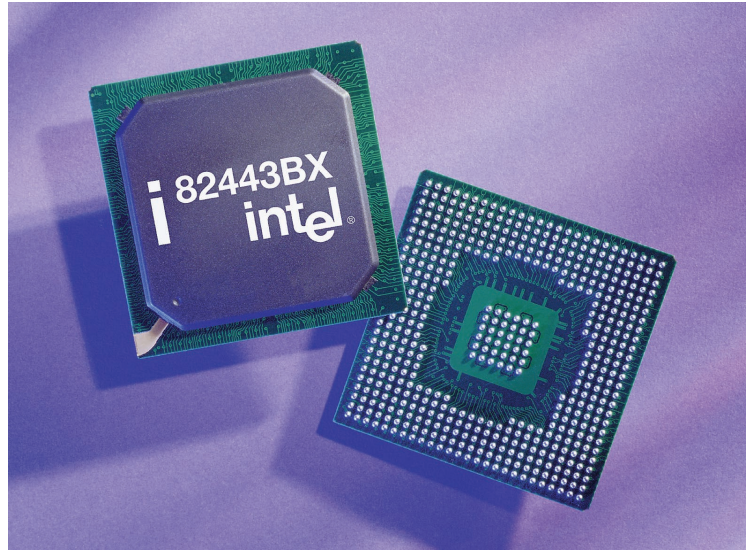


# Intel® 440BX AGPset

## Product Brief

### Product Highlights

- Intel® Quad Port Acceleration optimizes Intel® Pentium® III processor, 3D, and video performance with 100-MHz system bus and SDRAM
- Platform flexibility enables scalable 100-MHz and 66-MHz designs
- Enables “best-of-class” 3D, multimedia and gaming platforms with the Intel® graphics accelerator
- The first chipset to support the Mobile Intel® Pentium® II processor
- Enhanced power and thermal manageability
- Two-component chipset (82443BX and 82371AB) is form-factor equivalent with the previous generation Intel® 440LX AGPset



### Product Description

The Intel® 440BX AGPset is the first chipset to optimize Intel® Pentium® III processor performance for 3D and video applications with 100-MHz system bus/SDRAM. As Intel's second-generation AGPset with Intel® Quad Port Acceleration (QPA), the Intel 440BX AGPset improves the speed of the system bus from 66 MHz to 100 MHz, while increasing the width and depth of buffers to the system bus, Accelerated Graphics Port, SDRAM, and the PCI bus. This makes the Intel 440BX AGPset an excellent design solution for “next-generation performance” in consumer desktop, corporate small business desktop, mobile, workstation and server market systems. By optimizing the performance of the Pentium III processor with Dual Independent Bus (DIB) architecture, the new Intel 440BX AGPset supports the emerging set of visual computing applications, including 3D and video applications for design, data visualization, Web content creation, education, and gaming.

Designing with the Intel 440BX AGPset is simplified because the chipset enables scalable motherboard designs with either a 66-MHz or 100-MHz system bus. To further improve design investments, the Intel 440BX AGPset is form-factor compliant with the current Intel® 440LX AGPset. Design collateral is a superset of Intel 440LX AGPset design collateral, focusing on 100-MHz SDRAM and enhanced power and thermal management.

The Intel 440BX AGPset is the first chipset for Mobile Intel® Pentium® II processor-based systems, with an architecture optimized to deliver the highest performance in mobile systems. Specifically, the Intel 440BX AGPset features enhanced power management, including ACPI support, which makes it an ideal choice for low-power mobile platforms. With its flexible feature set, the Intel 440BX AGPset is the solution for Mobile Pentium II processor-based systems today and tomorrow.

## Optimizing Intel® Pentium® III processor performance

The Intel® 440BX AGPset optimizes the performance of the Intel® Pentium® III processor in desktop systems by implementing Intel® Quad Port Acceleration (QPA). This capability improves system performance through four-port concurrent arbitration of the processor bus, graphics bus, PCI bus, and SDRAM. Intel® QPA allows the Intel 440BX AGPset and the Pentium III processor to deliver optimal performance in visual computing applications, including 3D graphics.

| Features                           | Benefits   |
|------------------------------------|--|
| ■ 100-MHz System bus/SDRAM support | ■ Optimizes performance in platforms with the Pentium III processor with Dual Independent Bus (DIB) architecture, AGP technology and 100-MHz SDRAM                                 |
| ■ Expanded data buffering          | ■ Improves system performance and concurrency  |
| ■ Open page architecture           | ■ Multiple SDRAM pages reduce latencies for optimal 3D performance   |
| ■ Enhanced power management        | ■ Supports the PC '98 ACPI power-management specification for mobile and desktop systems   |
| ■ Platform flexibility             | ■ Enables scalable 100-MHz and 66-MHz designs; form-factor compliant with ATX, LPX, and NLX motherboards allows extension of existing Intel® 440LX AGPset-based design investments |

| Product                            | Package                   |
|------------------------------------|---------------------------|
| 82443BX AGP Host Bridge Controller | 492 Ball Grid Array (BGA) |
| 82371AB PCI-ISA Bridge             | 324 Ball Grid Array (BGA) |

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